

ACC NR: AP6004883

D

the charge exchange chamber were analyzed by means of electric and magnetic fields and those with the proper energy and mass, corresponding to the energy and mass of the initial probe beam particles, were recorded with a scintillation counter. The sensitivity was such that a beam current corresponding to 10^{-10} A of singly-charged ions could be employed. The injector and detector assemblies were enclosed in iron housings of approximately 1 cm wall thickness for magnetic shielding. The plasma density was calculated from the attenuation of the beam on traversing the plasma. The theoretical discussion is facilitated by the fact that once a beam particle is ionized it is removed from the beam by the ambient magnetic field, so that the possibility of the ion becoming neutralized again does not have to be considered. The most significant beam attenuating process is shown to be resonant charge exchange with plasma protons; ionization by electron impact is also significant, but other processes are negligible. The effect of scattering of beam atoms was partly eliminated by comparing the attenuation of the beam by the plasma with its attenuation by an equivalent mass of unionized gas, and the residual effect of scattering was shown experimentally to be imperceptible. The attenuation of the beam was independent of beam energy over the investigated range from 4 to 20 kev. The attenuation of such high energy beams is nearly independent of the plasma temperature. The decay curve of the plasma in the "Al'fa" machine from 1.5×10^{13} to 0.2×10^{13} cm⁻³ as measured with the hydrogen atom probe agreed within the experimental error with the decay curve measured with a microwave interferometer. It is concluded that with the investigated technique one can make

Card 2/3

L 16043-66

ACC NR: AP6004883

absolute measurements of the ion concentration in a hot hydrogen plasma over the range of plasma thickness from 5×10^{13} to 10^{16} cm^{-2} . The authors thank N.V. Fedorenko for his interest and for valuable discussions. Ye. G. Komar and A.M. Timonin for their interest, and M.M. Larionov and V.V. Rozdestvenskiy for performing the microwave interferometer measurements. Orig. art. has: 6 formulas and 7 figures. [15]

SUB CODE: 20/ SUBM DATE: 03May65/ ORIG REF: 015/ OTH REF: 007/ ATD PRESS: 4203

FW
Card 3/3

KISLYAKOV, B.

[Party organization in the struggle for high labor productivity]
Partiinaia organizatsiia v bor'be za vysokuiu proizvoditel'nost'
truda. Moskva, Gos. izd-vo polit. lit-ry, 1955. 70 p.
(Labor productivity) (MLRA 8:11)

KISLYAKOV, B.G.

Use of RRS-1 radio relay equipment in frontier areas. Vest.sviazi
20 no.1:16 Ja '60. (MIRA 13:5)

1. Nachal'nik Kokchetavskogo oblastnogo upravleniya svyazi.
(Radio, Shortwave)

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722820020-8

MARKOV, N.G., tekhnolog; TRUKHACHEV, M.W., tekhnolog; KISLYAKOV, P.V.,

Letter to the editor. Vest.mash. 35 no.12:18 '55. (MLRA 9:5)
(Sandblast)

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722820020-8"

KISLYAKOV, F. V.

1005* (Russian) Hydraulic Abrasive Blasting of Metal Parts. *Abrasivno-vodnyaya obrabotka detalей*. Kislyakov, F. V., Kuzakov, and M. M. Trukhachev. *Vestnik Mashinostroeniya*, v. 36, no. 9, Sept. 1958, p. 56-57.

Describes a machine designed for treating metallic surfaces with liquids carrying an abrasive material. The treatment is claimed to be free from the usual defects of other machining methods, and to improve the fatigue strength and corrosion resistance of the part treated.

Metatec 3

21

KISLYAKOV, I.D.; BOCHAROV, V.A.

Flotation activity of various copper minerals during the flotation of
ores from the cementation zone of the Uchaly deposit. TSvet. met.
35 no.6:ll-13 Je '62. (MIRA 15:6)

(Ural Mountains--Copper ores) (Flotation)

KISLYAKOV, I. P.

"Wear in Friction and the Structure of Metalloceramic Hard Alloys."
Sub 15 Jun 51, Moscow Inst of Nonferrous Metals and Gold imeni
M. I. Kalinin

Dissertations presented for science and engineering degrees in
Moscow during 1951.

SO: Sum. No. 480, 9 May 55

KISLYAKOV I.P.

MEYERSON, G.A.; KISLYAKOV, I.P.

Investigation of the mechanical wear of powdered-metal hard alloys
subjected to friction. Tren. i isn.mash. no.9:59-71 '54. (MLRA 7:9)
(Powder metallurgy) (Steel alloys) (Mechanical wear)

137-58-4-6905

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 84 (USSR)

AUTHOR: Kislyakov, I. P.

TITLE: Sintering Metal Powders with Formation of a Liquid (Molten) Phase [O spekanii metallicheskikh poroshkov s obrazovaniyem zhidkoy (rasplavlennoy) fazy]

PERIODICAL: Sb. nauch. tr. Mosk. in-ta tsvet. met. i zolota, 1955, Nr 25, pp 477-486

ABSTRACT: Problems of sintering with the formation of a liquid phase are examined. It is noted that even in sintering in the so-called solid phase it is necessary to take into consideration the possibility that small quantities of the liquid and gas phases will be present. The possibility of formation of a "dense" skeleton of a more refractory phase, under identical quantitative conditions of phase composition, depends upon the size and shape distribution of the grains. The formation of a "skeleton" of a more refractory phase with very thin "interlayers" of a more viscous phase in the joints of the "skeleton" must be deemed possible. In some cases this may even be deemed desirable for the purpose of obtaining a "skeleton" of less brittleness. M. B.

Card 1/1

1. Metal powders (Liquid)--Sintering--Theory

KISLYAKOV, I. P.

PHASE I BOOK EXPLOITATION

325

Kislyakov, Igor' Pavlovich

Metallurgiya redkikh metallov (Metallurgy of Rare Metals) Moscow, Metallurgizdat, 1957. 232 p. 7,500 copies printed.

Reviewers: Bol'shakov, K. A., Dr., Professor, and the Department of Non-Ferrous Metallurgy, Irkutskiy Gorno-metallurgicheskiy institut (Irkutsk Mining and Metallurgical Institute); Tseft, A. L., Dr., Prof., Corresponding Member of the Kazakh SSR Academy of Sciences; Skobeyev, I. K., Doctor, Professor; Nadol'skiy, A. P. Candidate of Technical Sciences; and Serikov, A. P., Candidate of Technical Sciences; Ed.: Belyayevskaya, L. V.; Ed. of Publishing House: Kamayeva, O. M.; Tech. Ed.: Attopovich, M. K.

PURPOSE: This is a textbook for students in the fields of mining and geological engineering, ore-concentration methods, and rare-metal metallurgy. It may also be used by engineers and other workers engaged in the production and application of rare metals.

Card 1/13

Metallurgy of Rare Metals

325

COVERAGE: The author discusses methods of extracting tungsten, molybdenum, tantalum, niobium, vanadium, titanium, zirconium, uranium, thorium, beryllium, lithium, the rare-earth metals, and trace associates (gallium, indium, thallium, germanium, and rhenium). Physical and chemical properties, together with information on fields of application, are given for each of these elements. The author devotes considerable attention to the composition of ores and concentrates, as well as to the behavior in metallurgical processes of all minerals introduced into the ores or concentrates, with a view to showing to what extent the composition governs the choice of a suitable procedure for ore reduction. Theoretical discussions of metallurgical processes are kept to a minimum. There are 159 references, of which 53 are Soviet, 96 English, 7 German, 2 French, and 1 Portuguese.

TABLE OF

CONTENTS: Foreword

Ch. I. General Considerations	3
1. Definition of the concept of "rare metal". Occurrence of rare metals	5
2. Classification of rare metals	8

Card 2/13

KISLYAKOV I. P.

Handbook on Machine-Building (Cont.)

SOV/3505

Spravochnik po mashinostroitel'nym materialam v chetyrekh tomakh, tom 2: Nechetnye me
tally i ikh splavy (Handbook on Machine-Building Materials in 4 vols., vol. 2,
Non-Ferrous Metals and Alloys) Moscow, Mashgiz, 1959. 639pp

Wear of the surface	400
Mechanical properties of molybdenum	460
Molybdenum alloys	464
Fields of application of molybdenum	467
Zirconium (Kislyakov, I. P., Candidate of Technical Sciences)	468
General characteristics	468
Chemical properties	470
Metallurgy of zirconium	476
Mechanical working of zirconium	476
Welding and soldering of zirconium and with zirconium	477
Mechanical properties of zirconium	478
Zirconium alloys	483
Vanadium (Kislyakov, I. P.)	491

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722820020-8

Handbook on Machine-Building (Cont.)

SOV/3505

Physical properties	491
Chemical properties	492
Metallurgy [extraction] and processing [powder metallurgy] of vanadium	493
Hot working and cold rolling	494
Applications of vanadium	499
Vanadium alloys	499
Tantalum and niobium (Zelikman, A. N.)	501
Physical properties	501
Chemical properties	504
Metallurgy of tantalum and niobium	509
Production of compact metal	509
Forming of tantalum and niobium	510
Cleaning and surface treatment	510
Alloys of tantalum and niobium	510
Applications of tantalum and niobium	514
Beryllium (Kislyakov, I. P.)	514

Card-17/02

Sintered carbides for cutting tools

533

31.210
11600
S/149/62/000/003/008/011
A006/A101

AUTHORS: Beylina, L. V., Kislyakov, I. P.

TITLE: Investigating the wettability and impregnability of titanium and zirconium nitride briquets with molten cobalt and nickel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, no. 3, 1962, 129 - 134

TEXT: To complete data on the preparation and properties of nitride-base alloys, the authors studied the preparation of Ti and Zr-nitride powders and the identification of their composition; the pressing and sintering of porous briquets; the wettability of nitrides with molten nickel and cobalt and the impregnability of porous briquets with these materials. The nitrides were obtained from standard grade Ti and Zr metals or oxides. Nitriding of the metals was carried out in two stages with slow temperature rise to 1,100 and 1,150°C. Nitriding of oxides was performed in 3 stages at 1,600°C. The composition and parameters of the crystal lattice of nitrides and the nitride grain size were determined. Briquets were pressed in a steel mold from Ti and Zr-nitride powders, mixed with a 5% rubber solution in benzine. The briquets were sintered in a vacuum furnace.

Card 1/3

S/149/62/000/003/008/011
A006/A101

Investigating the...

with a molybdenum heater, at 500 - 600°C for 45 minutes and at 1,400 - 1,450°C for 60 minutes. Impregnability and wettability of the briquets with molten nickel and cobalt was tested in the same furnace. The Co powder contained in %: 99.5 Co; 0.22 Ni; 0.10 O; 0.01 C; 0.06 Fe; 0.04 Si; 0.07 aq. The Ni powder was composed (in %) of: 99.56 Ni; 0.07 Co; 0.10 O; 0.01 C; 0.056 Fe; 0.04 Si; 0.016 C; 0.14 aq. Average values of wetting angles were determined. The tests yielded the following results: In wetting Ti-nitride with molten Co and Ni the wetting angles are in both cases below 90°. The possibility of saturating porous briquets, pressed from Ti-nitride powder, with molten metals, depends upon the purity and the granulometric composition of the nitride powder. Ti-nitride obtained by nitriding high-purity Ti metal can be sufficiently well impregnated with molten Co and Ni. Ti-nitride obtained by nitriding Ti-oxide in the presence of carbon (black) is wetted by the metal but not impregnated. This is explained by contamination with free carbon and its fine-grained nature. Zr-nitride obtained by nitriding Zr-metal powder is wetted with molten Co and Ni but not impregnated, this is probably due to the aforementioned causes and to the presence of residual oxygen, preserved on account of incomplete nitriding. It is assumed that the pseudo-binary Ti nitride - Ni and Ti nitride - Co sections show an eutectic nature.

Card 2/3

KISLYAKOV, I.P.
AID Nr. 978-1 28 May

WETTING OF WC AND TiC BY MOLTEN Cu AND Cu-Ni ALLOYS (USSR)

Kislyakov, I. P., L. V. Beylina, and A. N. Kuzin. Izvestiya vysshikh
uchebnykh zavedeniy. Tsvetnaya metallurgiya, no. 1, 1963, 117-120.

S/149/63/000/001/005/008

The Moscow Institute of Fine Chemical Technology has studied the wetting of solid WC and TiC by molten Cu, Cu-Ni alloys (with up to 30% Ni), Ni, and Co at 1080 to 1250°C in a pure Ar atmosphere. It was found that WC is readily wet by both Cu and Cu-Ni alloys. The contact angle θ in these systems is less than 90°, even at temperatures only 10-20°C above the melting point of the lowest-melting component. The θ decreases with increasing exposure time at a constant temperature or with increasing temperature. The temperature of complete wetting ($\theta = 0$) was found to be 1220-1250°C for Cu, and 1200-1220°C for the Cu-Ni alloys. The Cu-Ni alloys wet WC at a lower temperature, and more rapidly at the same temperature, than Cu; the higher the Ni content, the more rapid the wetting. No wetting of TiC by

Card 1/2

AID Nr. 978-1 28 May

WETTING OF WC AND TiC [Cont'd]

S/149/63/000/001/005/008

Cu or Cu-Ni alloys was observed at temperatures up to 1250°C and exposure time up to 2 hrs. It is believed, however, that a higher purity of TiC or increased exposure time would facilitate wetting. Complete wetting of TiC with Ni or Co takes place at temperatures 20 and 30°C higher than the melting temperature of Ni and Co, respectively. Melting at lower than the melting temperatures of pure Ni and Co, observed at the Ni-TiC and Co-TiC interfaces, is associated with the eutectic nature of the pseudobinary TiC-Ni and TiC-Co systems. The qualitative effect of the exposure time and temperature on the wetting of TiC by Ni and Co is similar to that in the wetting of WC by Cu and Cu-Ni alloys.

[MS]

Card 2/2

s/0000/63/000/000/0182/0191

ACCESSION NR: AT4030804

AUTHOR: Kislyakov, I. P.

TITLE: Packing, the growth of grains, and surface phenomena during sintering with the liquid phase

SOURCE: AN UkrSSR. Institut metallokeramiki i spetsial'nykh splavov. Poverkhnostnye yavleniya v rasplavakh i protsessakh poroshkovoy metallurgii (surface phenomena in liquid metals and processes in powder metallurgy). Kiev, Izd-vo AN UkrSSR, 1963, 182-191

TOPIC TAGS: packing, grain, surface phenomenon, sintering, liquid phase, ceramics, titanium carbide, tungsten carbide, cobalt, copper, iron, titanium nitride, nickel, surface tension

ABSTRACT: This paper is a continuation of the author's previous work (I. P. Kislyakov, Sbornik trudov MITsMIZ, no. 23, "Tekhnologiya tsvetnykh metallov" (technology of nonferrous metals), Metallurgizdat, M., 1952, p. 83). The author described the character of the kinetics of growth of grain by the change in character of the distribution curve of granulometric composition of the liquid phase. Results are presented in graphs and tables. The basic phenomena of the examined process

Card 1/2

ACCESSION NR: AT4030804

are: the formation of eutectic liquid, its distribution along capillary channels, filling the pores, adsorption, surface wetting of the solid phases, solution up to saturation at a given temperature, the establishment of a mobile equilibrium with the solution of irregularities and small particles, and the growth of large particles. With practically complete packing, the presence of the liquid phase assures a continuation in the growth of the grains of the solid phase with sufficient speed. Orig. art. has: 10 tables and 6 figures.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii, Moscow
(Moscow Institute of Fine Chemical Technology)

SUBMITTED: 23Nov63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: ML

NO REF SOV: 006

OTHER: 008

Card 2/2

KISLYAKOV, I.P.; SMIRNOVA, I.N.

Phase diagram in the system barium chloride-barium tungstate.
Zhur. neorg. khim. 9 no.12:2788-2789 D '64.

(MIRA 18:2)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
Lomonosova.

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722820020-8

DORFMAN, V.F.; BOL'SHAKOV, K.A.; KISLYAKOV, I.P.

Transport reactions in germanium precipitation by the iodide method.
Izv. AN SSSR. Neorg. mat. 1 no.1:37-46 Ja '65. (MIRA 18:5)

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722820020-8"

L-52623-6 EWT(1)/EWT(m)/EMP(1)/T/AMP(t)/ECC(b)-2/EMP(b) PI-4 IJP(c)
JD/GG

ACCESSION NR: AP5014074

UR/0363/65/001/004/0471/0477

40
39
B

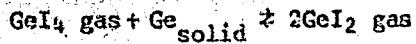
AUTHOR: Dorfman, V. F.; Bol'shakov, K. A.; Kislyakov, I. P.

TITLE: Conditions of crystallization of deposits from the gas phase in transport reactions

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 4, 1965,
471-477

TOPIC TAGS: epitaxial growing, germanium film, transport chemical reaction, mass transfer, crystal growth

ABSTRACT: The mechanisms of the transport of reagents in the gas phase and the possibility of controlling mass transfer in transport chemical methods have been studied by taking as an example the method of growing epitaxial films of germanium, based on the reversibility of the reaction



A formula is proposed for an approximate estimate of the critical velocity of a gas stream below which it is necessary to take into account the role of diffusion in the

Card 1/3

L 52623-65

ACCESSION NR: AP5014074

transport of the gaseous reagents.

$$v_o = \sqrt{D \cdot v_i \left| \frac{df(l/v_i)}{dl} \right| \left| \frac{df(l/v_i)}{dl} \right|}$$

In the iodide process of growth of germanium films in a horizontal gas stream, iodine and germanium iodides separate into phases in the source zone, and the dioxide and tetraiodide do so in the substrate zone. These effects lead respectively to the slowing down of iodination and to the nonuniformity of the epitaxial deposition on a vertical substrate. The uniformity of deposition is promoted by an inclined position of the substrate in the tube, a regular decrease in temperature along the axis of the deposition zone, and an increase in the rate of gas flow. The latter two factors also improve the homogeneity of the film thickness on various substrates in the same process, and the increase in flow rate accelerates the process. By alternating the regions of deposition with small source zones, one can achieve a multizone deposition from a single gas stream. A continuous deposition of epitaxial films can be achieved by means of a parallel arrangement of the source and substrates in the reaction tube, a suitable temperature gradient being present between them. "The authors express their appreciation to A. M. Anisimova.

Card 2/3

L 52623-65
ACCESSION NR: AP5014074

2

G. S. Banina, and M. S. Belokon' for their participation in the experimental work."
Orig. art. has: 4 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 20Jan65

ENCL: 00

SUB CODE: GC, SS

NO REF SOV: 008

OTHER: 000

284
Card 3/3

L 46215-55 REC(b)-2/EWA(c)/EWT(1)/EWT(m)/EWP(b)/T/EWP(t) PI-4 IJP(c) OG/JD

UR/0076/63/039/004/0996/1000

ACCESSION NR: AP5011472

AUTHOR: Dorfman, V. F.; Kislyakov, I. P.; Bol'shakov, K. A.

TITLE: Reaction kinetics in the iodide method of growing epitaxial germanium layers

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 4, 1965, 996-1000

TOPIC TAGS: germanium crystal, epitaxial germanium layer, crystal cultivation, iodide method, reaction kinetics, disproportionation reaction

ABSTRACT: The kinetics of the iodide process under dynamic conditions was studied in a horizontal quartz tube with hydrogen as the carrier of iodine. The substrates were germanium plates cut out of a single crystal along the (111) plane. The degree to which equilibrium was established in the zone of the source was measured by the ratio R = total consumption of germanium/total consumption of iodine. At sufficiently small R, the growth rate of germanium layers can assume even negative values, i.e., gaseous etching of the substrates begins. The temperature effect on the growth is expressed by the equation

$$\nu = [(8.2 \pm 0.5) \cdot 10^4 \cdot e^{-1144/RT} - (2.8 \pm 0.2) \cdot 10^4 \cdot e^{448/RT}] (\mu/\text{sec})$$

Card 1/2

L 48986-65

ACCESSION NR: AP5011472

where v is the rate of epitaxial growth. The dependence of the growth rate on the initial concentration of iodine vapors and hence GeI_2 vapors indicates that the disproportionation $\text{GeI}_2(s) + \text{GeI}_2(g) \rightleftharpoons \text{Ge}(s) + \text{GeI}_4(g)$ is a first-order, heterogeneous reaction. The nature of the distribution of the growth rate along the length of the reaction tube can be adjusted within certain limits by changing the temperature curve in the deposition zone. Orig. art. has: 7 figures and 7 formulas.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology)

SUBMITTED: 01Apr64

ENCL: 00 SUB CODE: SS, IC

NO REF Sov: 004

OTHER: 001

Card

212 MB

L 54029-65 EWP(e)/EWP(m)/EWP(t)/EWP(b)/EWP(i) IJP(c) JD

ACCESSION NR: AP5013525

UR/0076/65/039/005/1248/1251

541.124/.128

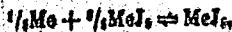
AUTHOR: Dofman, V. F.; Kiselev, I. P.; Bol'shakov, K. A.

TITLE: Doping of germanium layers during growth by the iodide method

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 5, 1965, 1248-1251

TOPIC TAGS: germanium film, epitaxial growth, germanium doping, gallium iodide, germanium iodide

ABSTRACT: The authors used antimony as the donor impurity and boron, aluminum, and gallium as the acceptor impurities. Attempts to dope germanium with boron and aluminum were unsuccessful. Gallium was iodinated under dynamic conditions in a laminar gas flow to study the equilibrium in the Ga-I system at various temperatures. The equilibrium constant K for the reaction $\text{GaI}_3 + \text{Ga} \rightleftharpoons 3\text{GaI}$ was calculated for the 600-900°C range. The effect of temperature on the equilibrium atomic ratio of iodine to gallium and the relationship between $\log K$ and the reciprocal temperature $1/T$ indicate the possibility of the following reactions for gallium:

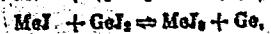
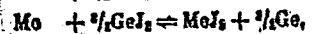
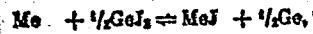


Card 1/2

L 54029-65

ACCESSION NR: AP5013525

O
Experimental data show that the following reactions also occur for gallium:



Orig. art. has: 3 figures and 16 formulas.

ASSOCIATION: none

SUBMITTED: 01Apr64

ENCL: 00

SUB CODE: GC

NO REF Sov: 001

OTHER: 004

Card 2/2

SMIRNOVA, I.N.; KISLYAKOV, I.P.

Diagram of states in the systems Na_2WO_4 - SrWO_4 and Na_2WO_4 - BaWO_4 .
Izv. AN SSSR. Neorg. mat. 1 no.7:1152-1165 Jl '65. (MIRA 18:9)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni M.V.
Lomonosova.

DORFMAN, V.F.; KISLYAKOV, I.P.; BOL'SHAKOV, K.A.

Kinetics of reactions in the iodide method of formation of
epitaxial films of germanium. Zhur. fiz. khim. 39 no.4:996-
1000 Ap '65. (MIRA 19:1)

I. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
Lomonosova.

L 29616-66 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6011319

SOURCE CODE: UR/0363/66/002/003/0507/0510

AUTHOR: Zobnina, A. N.; Kislyakov, I. P.; Strelina, N. V.

32
B

ORG: Moscow Institute of Precision Chemical Technology im. M. V. Lomonosova
(Moskovskiy institut tonkoy khimicheskoy tekhnologii)

TITLE: Conditions attending the formation of zinc molybdate

SOURCE: AN SSSR. Izvestiya, Neorganicheskiye materialy, v. 2, no. 3, 1966, 507-510

TOPIC TAGS: zinc, molybdenum, zinc compound, molybdate

ABSTRACT: The conditions of precipitation of zinc molybdate from aqueous solutions containing molybdate and zinc ions were determined by the potentiometric titration technique. The precipitation experiments were conducted at 22°-100°C with a solution pH of 4.36 to 6.2 for 18-144 hours. A standard calomel electrode served as a reference and a glass electrode was used as an indicator. The compositions of the precipitates and solutions were determined chemically. The solutions were prepared from chemically pure grade $Zn(NO_3)_2 \cdot 6H_2O$ and $Na_2MoO_4 \cdot 2H_2O$. It was found that regular zinc molybdate ($ZnMoO_4$) precipitates in the 5.0-6.0 pH range. At $pH > 6$ the

Card 1/2

UDC: 546.47'776

L 29616-66

ACC NR: AP6011319

ZnMoO₄-Zn(OH)₂ mixture precipitates and at pH<5.0 a mixture of ZnMoO₄ and isopoly-salts precipitates. It is possible that the ZnMoO₄ formation occurs via isopolysalt intermediates. Increased temperature and longer precipitation duration lead to better structure and less water content in the precipitate. At 278°±10°C ZnMoO₄·2H₂O becomes anhydrous. Orig. art. has: 5 figures and 2 tables.

SUB CODE: 07/ SUBM DATE: 12Jun65/ ORIG REF: 000/ OTH REF: 006

Card 2/2

L 32164-66 EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AP6011320

SOURCE CODE: UR/0363/66/002/003/0511/0513

AUTHOR: Zobnina, A. N.; Kislyakov, I. P.

ORG: Institute of Precision Chemical Technology im. M. V. Lomonosova (Institut tonkoy khimicheskoy tekhnologii)

TITLE: Investigation of the ZnO-MoO₃ system

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 3, 1966, 511-513

TOPIC TAGS: zinc oxide, molybdenum compound, molybdenum, molybdate EUTECTIC MIXTURE, X RAY ANALYSIS, MELTING POINT, MATERIAL MIXING

ABSTRACT: The ZnO-MoO₃ system was studied using thermal-differential analysis, x-ray analysis and the luminescence method. The object of the work was to fill a gap in the literature. Samples of various compositions were prepared by mixing and fusing (at 700-900°C) chemically pure ZnO, ZnMoO₄, and MoO₃. It was found that ZnMoO₄ (which has a melting point of 990° ± 10°C) undergoes a peritectic transformation into a 3ZnO₃ compound. This peritectic transformation occurs at 1060° ± 10°C. At the peritectic point, the ZnO-MoO₃ compound contains 46.52 mol % MoO₃. It was found that ZnMoO₄ and 3MoO₃ form an eutectic which contains 49.75 mol % MoO₃ and has a melting point of 985° ± 10°C. The ZnMoO₄ also forms a eutectic with MoO₃; this eutectic contains 81.3 mol % MoO₃ and its melting point is 660° ± 10°C. The authors express their thanks to N. V.

UDC: 546.47'776

Card 1/2

L 32164-66

ACC NR: AP6011320

2

Stemin for participating in this work and to Yu. S. Leonov and M. A. Koustantinova-Shlezinger for kind consultations concerning the luminescence method. Orig. art. has: 1 figure.

SUB CODE: 07/ SUBM DATE: 12Jul65/ ORIG REF: 003/ OTH REF: 004

Card 2/2 Gd

I. 42178-66 EWT(m)/T/EWP(t)/ETI IJP(c) WW/JD/JG/GD
ACC NR: AT6022480 SOURCE CODE: UR/0000/65/000/000/0116/0120
(A)

AUTHOR: Kislyakov, I. P.; Svirnova, I. N.; Bykov, B. I.; Khomutova, T. V.; Takunov,
T. V.

44
ORF: Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Moskovskiy Bi-
Institut tonkoy khimicheskoy tekhnologii).

TITLE: Synthesis and solubility of barium, calcium, and manganese tungstates in
melts of certain salts

SOURCE: Vsesoyuznoye soveshchaniye po fizicheskoy khimi rasplavlenykh soley. 24,
Kiev, 1963. Fizicheskaya khimiya rasplavlenykh soley (Physical chemistry of fused
salts); trudy soveshchaniya. Moscow, Izd-vo Metallurgiya, 1965, 116-120.

TOPIC TAGS: tungstate, barium compound, calcium compound, manganese compound,
solubility, chemical precipitation, aqueous solution, temperature dependence,
recrystallization

ABSTRACT: Manganese tungstate was prepared by precipitation from aqueous solutions
of MnCl₂ and Na₂WO₄, and MnWO₄·2H₂O was obtained. A study of the solubility of
dehydrated MnWO₄ in Na₂WO₄ and Na₂WO₄ + 20% NaCl melt showed it to be strongly tem-
perature-dependent. Three different types of MnWO₄ crystals corresponding to three
different regions of crystallization were obtained. Manganese tungstate was also pre-
pared in the melt via the reaction Na₂WO₄ + MnCl₂ → 2NaCl + MnWO₄, and the product did
not differ from that prepared by recrystallization. Barium tungstate was obtained by

Cord 1/2

L 42178-66

ACC NR: AT6022480

precipitation from dilute aqueous solutions of BaCl_2 and Ba_2WO_4 . A microvisual-poly-
thermal method was used in studying the solubility in the $\text{BaCl}_2\text{-BaW}_4$ system at high
temperatures. Coarsely crystalline BaW_4 was prepared by recrystallising dehydrated
 BaW_4 in molten BaCl_2 and also by the reaction $\text{BaCO}_3 + \text{WO}_3 \rightarrow \text{BaW}_4 + \text{CO}_2$ in the same
medium. Calcium tungstate was obtained in similar fashion. Its solubility in CaCl_2
at high temperatures was determined. Attempts to crystallise CaW_4 from CaCl_2 melt
showed this method to be inappropriate in air (the CaW_4 crystals contained excess
 CaO). Orig. art. has: 4 figures and 1 table.

SUB-CODE: 07/ SUBM DATE: 23Aug65/ ORIG REF: 003/ OTH REF: 002

MS
Card 2/2

L 06226-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6029823

SOURCE CODE: UR/0363/66/002/008/1467/1476

AUTHOR: Kislyakov, I. P.; Mal'nikov, A. I.; Sokolovskaya, R. V.; Tokunov, O. I.

ORG: Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Moskovskiy Institut tonkoy khimicheskoy tekhnologii)

TITLE: Reactions of formation of barium tungstates in solid phases

SOURCE: AN SSSR, Investiya. Neorganicheskiye materialy, v. 2, no. 8, 1966, 1467-1476

TOPIC TAGS: tungstate, barium compound, barium oxide, carbonate, CHEMICAL REACTION

ABSTRACT: Thermal, x-ray, phase and chemical analyses were used to study the solid-phase reactions of BaCO_3 with WO_3 , BaCO_3 with BaWQ_4 , BaCO_3 with $2\text{BaO}\cdot\text{WO}_3$, and BaWQ_4 with $3\text{BaO}\cdot\text{WO}_3$. The formation of BaWQ_4 begins at 300°C ; a catalytic participation of $\text{H}_2\text{O(g)}$ in the formation of BaWQ_4 is postulated. The reaction of $\alpha\text{-BaCO}_3$ with WO_3 increases markedly at $515-575^\circ\text{C}$ and in an abrupt manner at 950°C as a result of the formation of a liquid eutectic phase composed of 50 mole % BaWQ_4 and 50 mole % WO_3 . The reaction of formation of BaWQ_4 does not reach completion in stoichiometric compositions (at a heating rate of 400 deg/hr) up to 1280°C . An increase in excess BaCO_3 above the stoichiometry causes a virtually complete formation of BaWQ_4 at 950°C . It is shown that when the mixtures $\text{BaCO}_3/\text{WO}_3 > 1$ and $\text{BaCO}_3/\text{BaWQ}_4 = 1$ are heated, the reactions of formation of $2\text{BaO}\cdot\text{WO}_3$ and $3\text{BaO}\cdot\text{WO}_3$ occur irrespective of the relative amount

Card 1/2

UDC: 546.431'786

L 06226-67

ACC NR: AP6029823

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000722820020-8
 of BaCO_3 present in the mixture. $2\text{BaO}\cdot\text{WO}_3$ is formed by the reaction of BaCO_3 and WO_3 at 810°C . The rate of its formation increases markedly above $950-990^\circ\text{C}$. The effect of formation of $2\text{BaO}\cdot\text{WO}_3$ is displayed at $1130-1160^\circ\text{C}$ depending upon the initial composition. In addition to $2\text{BaO}\cdot\text{WO}_3$, $3\text{BaO}\cdot\text{WO}_3$ begins to form at about 1000°C , and the rate of its formation increases substantially above 1090°C . The effect of formation shows up at $1210-1280^\circ\text{C}$ depending upon the initial composition. Authors thank G. A. Vydrik for performing test recordings of the composite thermograms and S. I. Kopeykin and I. V. Kovaleva for their participation in the work. Orig. art. has: 5 figures, 1 table and 11 formulas.

SUB CODE: 07/ SUBM DATE: 27Jun65/ ORIG REF: 008/ OTH REF: 009

Card 2/2 *tll*

L 1555-66 EPA(s)-2/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG
ACCESSION NR: AP5022269 UR/0363/65/001/007/1162/1165
541.12.012

AUTHOR: Smirnova, I. N.; Kislyakov, I. P.

TITLE: Phase diagrams of the systems Na sub 2 Wo sub 4-SrWO sub 4 and Na sub 2 Wo sub 4-BaWO sub 4

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 7, 1965,
1162-1165

TOPIC TAGS: tungstate, sodium compound, strontium compound, barium compound

ABSTRACT: The study of the phase diagrams involved the use of thermography with simple and differential recording on a KVT-3 electronic recording potentiometer, the microvisual-polythermal method, and x-ray phase analysis. The phase diagram of the Na_2WO_4 - SrWO_4 system is of eutectic type; the composition of the eutectic is 3 mole % SrWO_4 , and its melting point is 680-685°C. Sodium tungstate has 2 polymorphic transformations, at 575 and 592°C, both of which appear on the cooling curves. The Na_2WO_4 - BaWO_4 system is analogous to the previous one. The composition of the eutectic is 4 mole % BaWO_4 , and its melting point is 680-683°C. The temperatures of the phase transformations are tabulated and the phase diagrams are given for both systems. Orig. art. has: 2 figures and 2 tables.
Card 1/2

L 1555-66

ACCESSION NR: AP5022269

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology)

SUBMITTED: 23Mar65 ENCL: 00 SUB CODE: IC, SS

NO REF SOV: 000 OTHER: 002

Card 2/2 50

ACC NR: AR6026486

SOURCE CODE: UR/0274/66/000/004/A022/A023

AUTHOR: Kislyakov, I. S.

TITLE: Frequency conversion and network transformations of RC-filters

SOURCE: Ref. zh. Radiotekhnika i elektron svyazi, Abs. 4A142

REF SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp. 26, 1965, 77-84

TOPIC TAGS: frequency conversion, ~~RC-filter~~, IR filter, resistance
Capacitance

ABSTRACT: Frequency conversion is considered in the synthesizing active RC filters which recently have received considerable attention in connection with IR-band uses and semiconductor-device developments. The problem is solved for an active nonautonomous quadripole consisting of R, C, and active elements. Derived from mesh-current equations, this formula for the current or voltage transfer function $T(p) = 1/(r\beta p)$ permits analyzing the relations between the conversion of a normalized complex frequency p and the corresponding variations of circuit elements: normalized resistance factor r and normalized capacitance factor β . Here, $r_{1k} = \frac{R_{1k}}{R_0}$; $\beta_{1k} = R_{1k}\omega_0 C_{1k}$.

where R_0 and ω_0 are arbitrary resistance and frequency, respectively. The derived formulas permit determining the configuration and the normalized coefficients of filter elements if the circuit of the initial RC-filter is known. In each case, two filter solutions are possible; an RC-circuit and an RL-circuit which have identical transfer functions. Numerical examples of using the above method are cited. A. K.

[Translation of abstract]

Card 1/1

SUB CODE: 09

UDC:621.372.54

30V/6-59-T-2/25

Competition for the Best Improving Suggestion

(Several Zapovedny ACP (Northwest ACP) has an auxiliary State Commission for Determining the Corrections of the Curvature of the Geodesic Line and of the Sphere Process.) 1) G. S. Buzunov (Zapovedny ACP (Razna ACP)) - "Variation of the Construction of the Meilleuvre." 4) G. S. Buzunov, V. N. Shcherbinin (Zapovedny ACP) - "Zero Temperature Coefficients of the Parameters of Gravity." 5) P. I. Ponomarev (Motorway ACP) - "Service for Building Automation." 6) V. N. Chirkov (Motorway ACP) - "Construction of the Motorway." 7) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 8) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 9) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 10) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 11) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 12) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 13) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 14) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 15) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 16) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 17) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 18) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 19) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 20) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 21) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 22) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 23) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 24) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 25) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 26) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 27) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 28) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 29) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 30) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 31) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 32) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 33) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 34) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 35) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 36) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 37) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 38) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 39) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 40) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 41) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 42) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 43) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 44) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 45) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 46) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 47) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 48) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 49) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway." 50) V. N. Tsvetkov (Motorway ACP) - "Technical Equipment for the Construction of the Motorway."

Cart 4 / 6

Card 6/6 Dr. V. Feissner, (WIFCA) "Improving the Method of Precipitation of the Silver Nitrate in Used Solutions".

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000722820020-8"

~~KISLYAKOV, K.~~, laureat Stalinskoy premii; tokar'; PETUSHKO, P.I., inzhener;
DONSKOY, Ya., redaktor; KUCHERAKIY, I., tekhnicheskiy redaktor.

[Entire brigades of excellent workers] Skvosnye brigady otlichnogo
kachestva. [Kharkov] Khar'kovskoe knishno-gazetnoe izd-vo, 1952.
36 p.
(MLRA 8:2)

1. Khar'kovskiy turbogeneratornyy zavod imeni S.M.Kirova (for Kislyakov).

(Kharkov--Turbines)

KISLYAKOV, K.S.

TJ1160.A34

TREASURE ISLAND BOOK REVIEW

AID 852 - S

KISLYAKOV, K. S.

RABOTA SKVOZNOY BRIGADY OTLICHNOGO KACHESTVA (Work of a Composite Crew of Machine-tool Operators). In Akademiya Nauk SSSR. Peredovoy opyt novatorov mashinostroyeniya (Progressive Experience of Leading Men in the Machine-Building Industry) 1954. Part I: Skorostnyye metody mekhanicheskoy obrabotki metallov (High-Speed Methods in Machining of Metals). p. 49-52.

The author of this short report, one of the leading operators of vertical boring and turning machines at the Khar'kov Turbogenerator Plant im. Kirov, describes the organization and work of assorted crews of highly-qualified men engaged in production of a certain unit of the steam turbines, generators or other power equipment.

The output of these crews (89 in number) organized in various shops, with a few additional groups organized "inter-departamentally", i.e., consisting of members from as many as four different shops, shows great improvements in quality and quantity and reduction of spoilage. The author makes several suggestions for productivity of labor at the plant.

1/1

ZOLOTAREV, A.N., kand. ekon. nauk; KISLYAKOV, K.S., tokar'-karusel'shchik.

Study and generalization of leading work methods as a factor in
the rise of productivity. Trudy Khar', inzh.-ekon. inst. 9:37-55
'57. (MIRA 11:6)

(Efficiency, Industrial)

KISLYAKOV, Konstantin Sergeyevich, Geroy Sotsialisticheskogo Truda,
tokar'; DONSKOY, Ya.Ye., red.; LIMANOVA, M.I., tekhn. red.

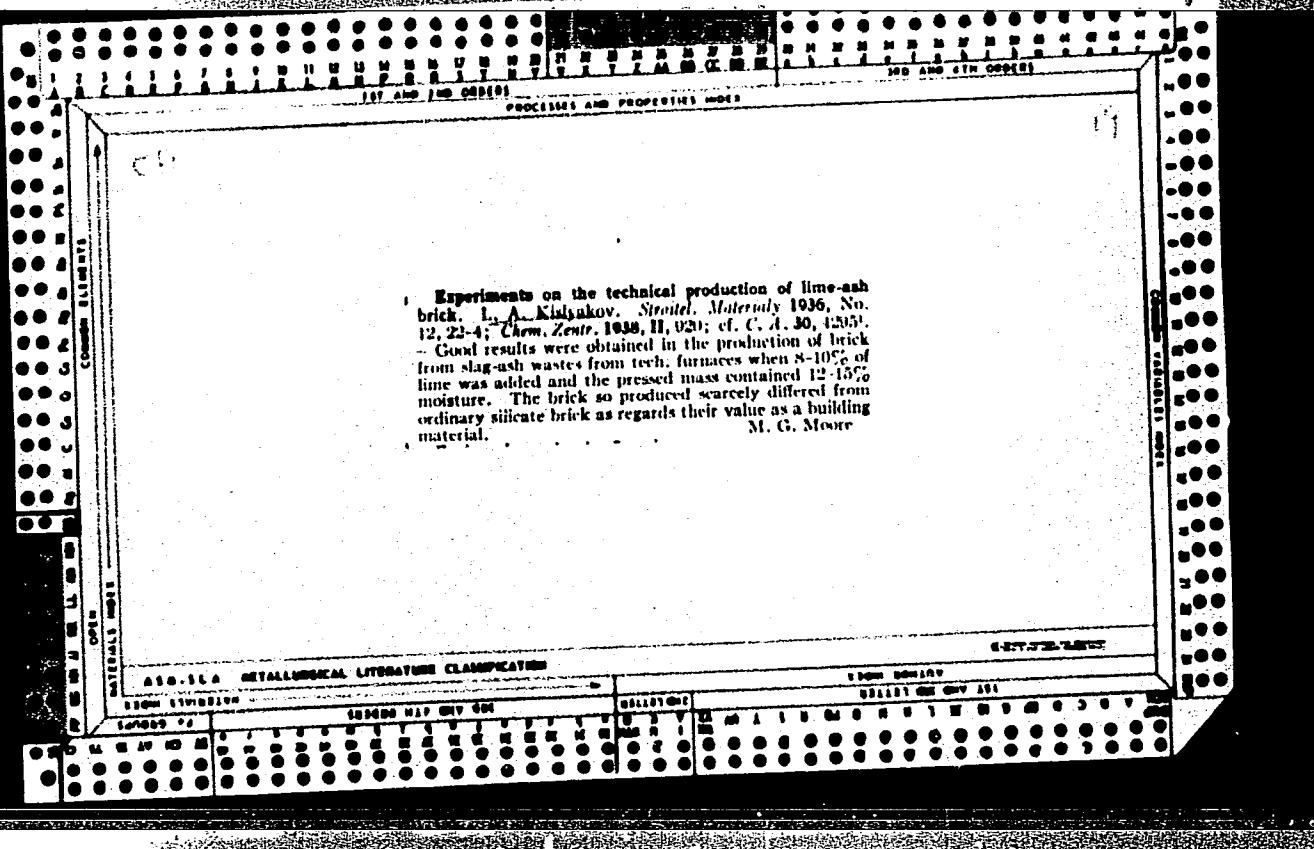
[Achieved through the work of everyone of us] Trudom kashdogo is
nas. Khar'kov, Khar'kovskoe knizhnoe izd-vo, 1962. 35 p.
(MIRA 15:11)

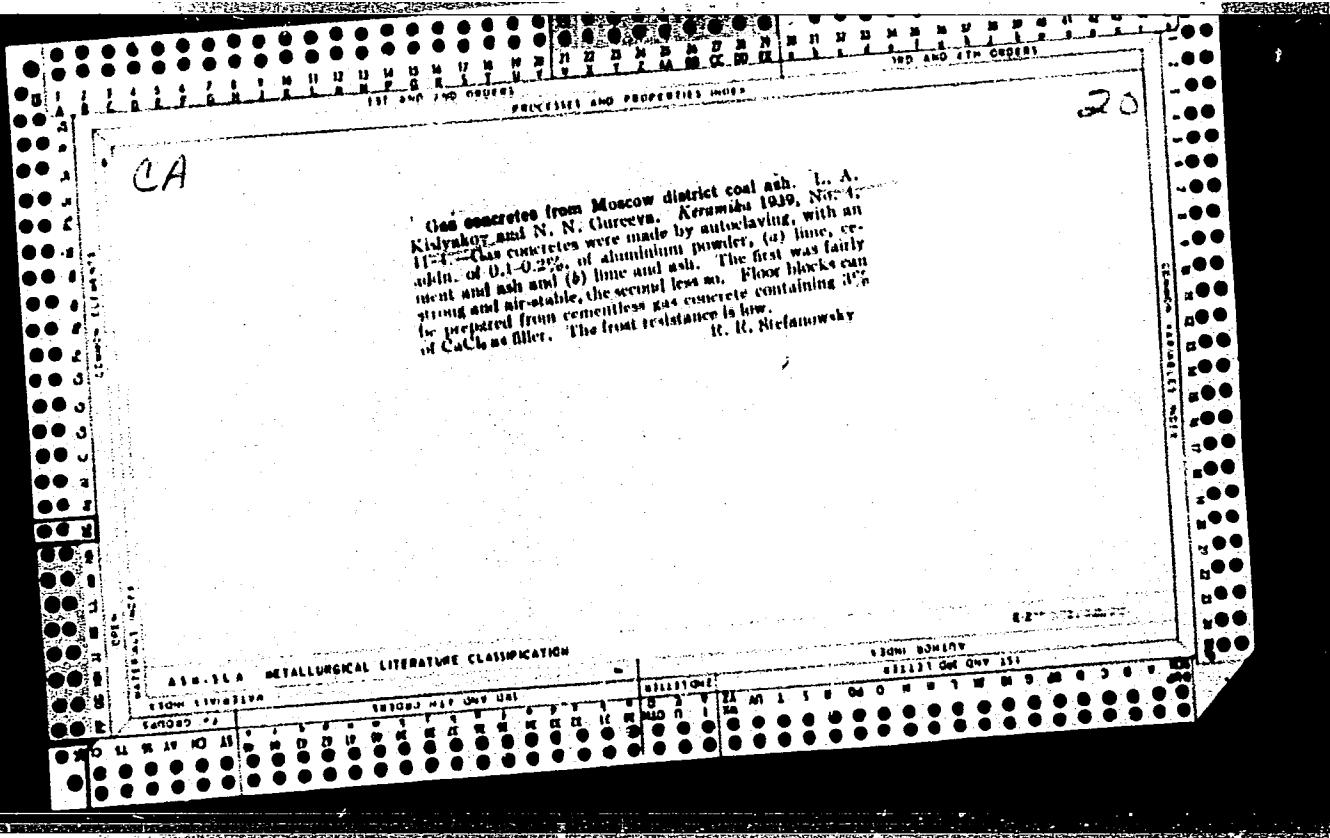
1. Khar'kovskiy turbinnyy zavod imeni S.M.Kirova (for Kislaykov).
(Kharkov--Turbines)

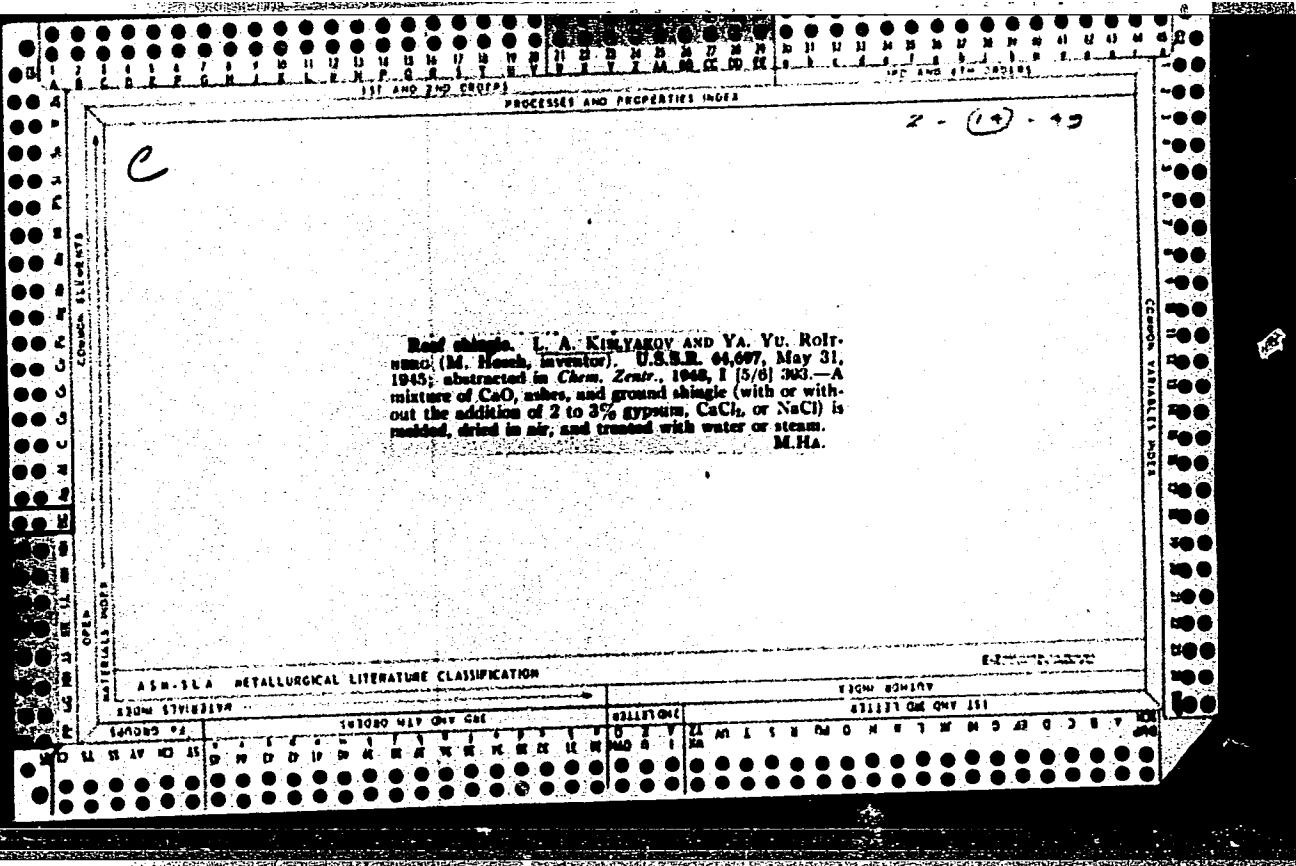
Ash and slags of Moscow basin coal burned in a pul-
verized condition as a raw material for the production of
WALL-CONSTRUCTION MATERIALS. L.A. Kislyakov. Stroitel. Material.
1935, No. 12, 24-37.
E. E. Stefanovsky

10

ASLIB-LA METALLURGICAL LITERATURE CLASSIFICATION







KISLYAKOV, L. A.

VOLZHENSKIY, A. V. and KISLYAKOV, L. A. "Gypsum materials and goods for constructing high buildings", Mest. stroit. materialy, 1948, Issue 6, p. 22-26/

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 7 1949).

KISLYAKOV, L. A.

Dissertation: "Changes of the Properties of Gypsum Calcined at High Temperatures." Cand Tech Sci, Sci Res Inst of Construction Engineering, Moscow, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 5, Mar 54)

SO: SUM 243, 19 Oct 54

11 L.S.L/4A6V, L.A.
VOLZHANSKIY, A.V., professor; KISLYAKOV, L.A., kandidat tekhnicheskikh nauk; TIKHIN, L.Ye., inzhener, nauchnyy redaktor; ROSTOVSEVA, M.P., redaktor; PERSON, M.N., tekhnicheskiy redaktor

[Production of hollow reinforced-concrete beams and panels for ceilings and floors] Proizvodstvo shhelezobetonykh pustotelykh balk-nastilov i paneli perekrytii. Moskva, Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1954. 60 p. (MLRA 7:10)

1. Chlen-korrespondent Akademii arkhitektury SSSR (for Volzhenskiy)
(Girders) (Precast concrete construction)
(Floors, Concrete)

NAGIRNYAK, F.I.; KISLYAKOV, L.D.; NIKITIN, Yu.I.

Practical experience with hydraulic cyclones at the Krasnouralsk
concentration plant. TSvet.met. 29 no.2:9-15 P '56. (MIRA 9:6)

1.Uralmekhanebr.
(Krasnouralsk--Copper--Metallurgy)

137-58-6-11328

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 10 (USSR)

AUTHORS: Kislyakov, L.D., Epel'man, L.L., Sinel'shchikova, Ye.N.,
Skorodumova, L.P.

TITLE: Results of Introduction of Selective Flotation of Copper-and-zinc Ores at the Krasnoural'sk Concentrating Mill (Rezul'taty osvoyeniya selektivnoy flotatsii medno-tsinkovykh rud na Krasnoural'skoy obogatitel'noy fabrike)

PERIODICAL: Byul. Tsentr. in-t inform. M-va tsvetn. metallurgii SSSR, 1957, Nr 3, pp 13-20

ABSTRACT: Experiments were conducted with various procedures for the selective flotation (F) of Cu-Zn ores of the Sibayev deposit, under industrial and pilot-plant conditions. The procedure recommended is one of direct selective F, first of Cu, with fine comminution of the concentrate of the primary flotation, followed by double fining thereof, and then of Zn-FeS₂ flotation with fine grinding of the combined concentrate with subsequent F of Zn therefrom, with four finings. FeS₂ concentrate is also separated from the tailings of the combined F. The Zn is depressed during the copper cycle by cyanide and ZnSO₄, while

Card 1/2

137-58-6-11328

Results of Introduction (cont.)

CuSO_4 is used to activate the Zn during the zinc cycle. The collector is butyl xanthate. Hydrocyclones are used for control classification and thickening. Qualitative and equipment diagrams of the F process are presented, as well as tables of F procedures and performance criteria thereof.

L.B.

1. Copper ores--Flotation 2. Zinc ores--Flotation

Card 2/2

KISLYAKOV, L.D.; BELOVOD, R.N.; EPEL'MAN, L.L.; SINEL'SHCHIKOVA, Ye.N.

Adopting the use of hydraulic cyclones at the Krasnoural'sk
Ore Dressing Plant. Trudy Uralmekhanobra no.5:11-30 '59.
(MIRA 15:1)

1. Ural'skiy nauchno-issledovatel'skiy institut mekhanicheskoy
obrabotki poleznykh iskopayemykh (for Kislyakov, Belovod).
2. Krasnoural'skaya obogatitel'naya fabrika (for Epel'man,
Sinel'shchikova).

(Krasnoural'sk--Ore dressing)
(Separators (Machines))

BOCHAROV, V.A.; KISLYAKOV, L.D.

Collective flotation of secondary copper and zinc sulfides with
subsequent additional comminution and separation of the collective
concentrate. Tsvet. met. 35 no.1:6-10 Ja '62. (MIRA 16:7)
(Sulfides) (Flotation)

KISLYAKOV, L.D.; BOCHAROV, V.A.; ARZHANNIKOV, G.I.

Flotation of pyrite with the use of smoke gases. TSvet. met.
(MIRA 16:4)
36 no.4:22-26 Ap '63.

(Flotation) (Pyrites)

BOCHAROV, V.A.; KISLYAKOV, L.D.; ARZHANNIKOV, G.I.

Ways of improving the quality of concentrates during the dressing
of Ural copper-zinc ores. TSvet. met. 36 no.8:12-16 Ag '63.
(MIRA 16:9)

(Ural Mountains--Nonferrous metals)
(Ore dressing--Quality control)

BOCHAROV, V.A.; KISLYAKOV, L.D.

Conditions for the flotation of various copper and zinc sulfides out
of ore pulp. TSvet. met. 36 no.12:8-11 D '63. (MIRA 17:2)

ADAMOV, E.V.; KISLYAKOV, L.D.; NAGIRNYAK, F.I.; TROITSKIY, A.V.,
otv. red.

[Ore dressing practices for nonferrous, rare, and noble
metals] Praktika obogashcheniya rud tsvetnykh redkikh i
blagorodnykh metallov na fabrikakh SSSR. Moskva, Izd-vo
"Nedra," 1964. 238 p. (MIRA 17:8)

1. Ural'skiy nauchno-issledovatel'skiy institut mekhaniko-
cheskoy obrabotki poleznykh iskopayemykh.

KISLYAKOV, L.D.; BOCHAROV, V.A.; ARZHANNIKOV, G.I.

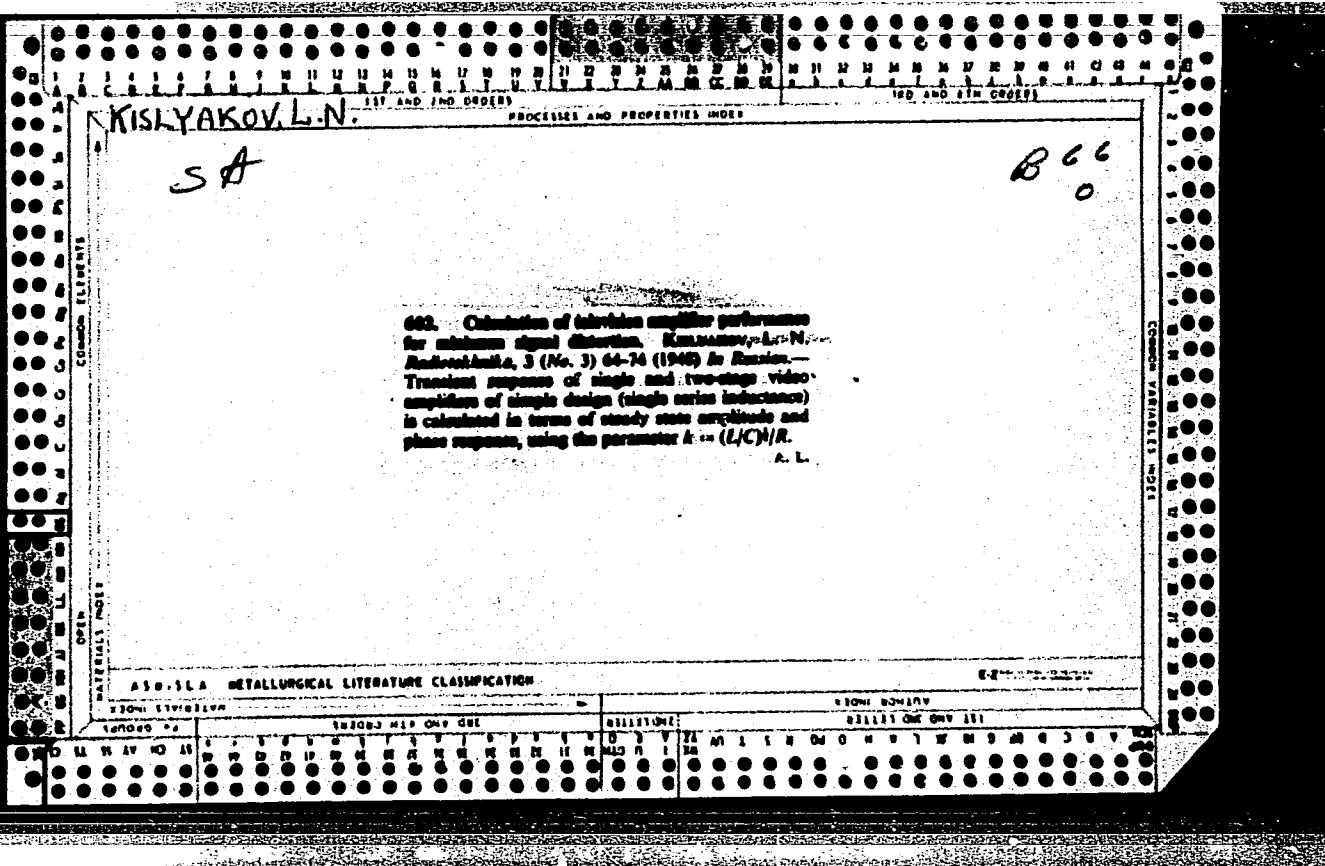
Flotation practices of Ural mountain pyrites and ways of
improving the qualitative indices of ore dressing. TSvet. met.
37 no.6:ll-14 Je '64. (MIRA 17:9)

VERSHININ, Ye.A.; FILIMONOV, V.N.; KISLYAKOV, L.D.; CHVANOV, P.A.;
BELYAYEV, M.A.; KOROBKOV, V.P.

Efficient flotation flow chart for collective concentrates at the
Sibay plant. Tsvet. met. 38 no.4:14-17 Ap '65. (MIRA 18:5)

DEMIDOVICH, G.I.; KISLYAKOV, L.D.

Study of floatability of antlerite from the Udekan deposit.
Tsvet. met. 38 no.4s21 Ap 165. (MIRA 18e5)



KISLYAKOV, L. N.

IA 20/49T102

USSR/Radio
Amplifiers
Mathematics, Applied

Sep/Oct 48

"Transfer Processes in an Amplifier Stage With a Complex Corrective Network," L. N. Kislyakov, Cand Tech Sci, 10 $\frac{1}{2}$ pp

"Radiotekh" Vol III, No 5- [40.43-53]

Derives equation for output voltage of amplifier stage with complex correction when a single voltage impulse is applied to the input. Gives conditions for optimum correction, and investigates problem of effectiveness of a complex corrective network.

Submitted 10 Jun 48.

20/49T102

KISLYAKOV, N. A.

"Nekotoryye brachnyye tseremonii u narodov Sredney Azii i problema materinskogo roda."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-10 Aug 64.

L 18767-63

EPR/EPA(b)/EPF(c)/EWT(1)/EPF(n)-2/BDS AFFTC/ASD/IJP(C)/SSD

Ps-4/Pd-4/Pr-4/Pu-4 WW
ACCESSION NR: AR3006433

S/0124/63/000/008/B025/B026

SOURCE: RZh. Mekhanika, Abs. 8E150

78

AUTHOR: Rebrov, A. K.; Kislyakov, N. I.TITLE: Heat transfer by a bounded plane plate during free motion of a rarefied gasCITED SOURCE: Tr. Kazansk. aviat. in-ta, vy* p. 66, 1961, 91-96

TOPIC TAGS: heat transfer, rarefied gas

TRANSLATION: This work is devoted to the experimental determination of the heat transfer from a vertical plate in a rarefied gas. The experimental apparatus and technique was described in another of the author's works (see ref. 8E149). Plane packets of dimension 240 by 80mm and 80 by 80mm and thickness 1.4mm, made by sandwiching heating wires in a mica shell between copper plates of .5mm thickness. The heater worked from an accumulator. The experiments were conducted in the range $5 \cdot 10^{-3} < p < 120$ mm mercury. The experimental data show that the dependence of the thermal transfer coefficient α on the pressure p is qualitatively of the same form as for the cylinders, but the thermal transfer from the plates is less. It was shown that the thermal transfer from the plates in a bounded space depending on

Card 1/2

L 18767-63
ACCESSION NR: AR3006433

pressure, can occur in the system of free motion, common thermal conductivity, and thermal conductivity, weakened by the presence of a discontinuity at the thermal-transferring surface. All the experimental data was put in the form of criterial dependences. For $5 \cdot 10^2 < GP < 2 \cdot 10^6$ the dependence

$$N_H = 0.74 (G_H P)^{0.25}$$

is given, where N , G , P are the Nusselt, Grasgof and Prandtl numbers. The index H signifies that as a characteristic of the length, the height of the plate, H is taken. Comparison is made of the experimentally obtained data with the formula of M. A. Mikheev. An analysis of the effect of the heat outflow from the side boundary of the plate is given. It is shown that the finite width of the lateral boundary must be taken into account for $\delta_{DH} < 18B$. Here δ_{DH} is the thickness of boundary layer at the height of the upper edge of the plate, B is the width.

Bibliog. 6 names. V. A. Sukhnev

DATE ACQ: 28Aug63

SUB CODE: AI, PH

ENCL: 00

Card 2/2

ACCESSION NR: AT4024399

8/2529/61/000/066/0091/0096

AUTHOR: Rebrov, A. K.; Kislyakov, N. I.

TITLE: Heat transfer from a limited flat plate during free convection in a rarefied gas

SOURCE: Kazan. Aviatsionnyy institut. Trudy*, no. 66, 1961. Aviatsionnyye dvigateli (Aircraft engines), 91-96

TOPIC TAGS: chamber pressure, heat conduction, heat convection, heat exchange, heat transfer, convection, free convection, rarefied gas, convecting force, shell temperature, temperature, pressure

ABSTRACT: Existing generalizations and analyses applied to experimental data obtained on heat transfer from flat plates refer to cases where convective forces are localized to the very surface of the cooling body, i.e. when the thickness of the gas layer in motion is considerably less than the characteristic dimension of the surface. For theoretical investigations of such cases, common simplifications applied to the boundary layer theory are acceptable. However, in altitude equipment design and in analyses of heat systems in technological processes with vacuum applications, it is necessary to account for a considerable growth of boundary

Card 1/4

ACCESSION NR: AT4024399

layer thickness at decreasing pressure and for the influence of body form. To study these influences, an investigation on heat transfer from vertical flat plates was performed by the authors, and the test installation was described by one of them elsewhere (Accession Nr.: AT4024397). The test plates, packages of $240 \times 80 \times 1.4 \text{ mm}^3$ and $80 \times 80 \times 1.4 \text{ mm}^3$, consist of copper sheets 0.5 mm thick soldered at the edges with a space between the sheets accommodating mica-insulated heating wire. During experiments heating power, plate surface, and vacuum chamber shell temperatures, and the pressure in the chamber were measured. The tests were conducted over a pressure range of $5 \times 10^{-3} < P < 120 \text{ mm of Hg column}$. Two vertical positions were used for the $240 \times 80 \times 1.4 \text{ mm}^3$ plate, once with the larger and once with the smaller side upright. It was found that film coefficients at heat transfer from a flat plate in the limited space of a vacuum chamber, first drop sharply with decreasing pressure, corresponding to a system of free convection; at that time the pressure dependence is only slight, and the system is one of common heat conduction; finally, with further decreases of pressure, the heat conduction system remains, but is weakened by the presence of a larger temperature step at the heat transfer surface. The existence of a system corresponding to common heat conduction was explained by the influence of chamber walls hindering a free convection. In comparison with tests obtained elsewhere on cylinders (Accession Nr.: AT4024397), the heat transfer from flat plates is considerably lower. A discussion follows

Card 2/4

ACCESSION NR: AT4024399

with regard to the question of choosing a side of a rectangular plate for consideration as the characteristic length for correlation. It was concluded that in cases of free convection, M. A. Mikeyev's formula is applicable:

$$\text{Nu} = 0.54(\text{GrPr})^{0.25} \quad \text{at } \text{GrPr} > 5 \times 10^2,$$

where Nu and Gr are the criteria of Nusselt and Grashof, whereby the shorter side of the rectangular plate has to be used as the characteristic length and Pr is criterion of Prandtl. In the investigated case, however, the heat transfer is described by the formula:

$$\frac{\text{Nu}}{H} = 0.74(\text{Gr Pr})^{0.25} \quad \text{at } 5 \times 10^2 < \text{GrPr} < 2 \times 10^6,$$

where the subscript H indicates that the height of the plate has to be used as the characteristic length. The more intensive heat transfer indicated by the last formula is due to conditions of experiment, where boundary layer thickness is on the same order of magnitude as plate dimensions or greater, and, consequently, heat transfer is intensified by additional heat transfer in directions across planes passing through edge faces. Orig. art. has: 3 figures and 10 formulas.

Card 3/4

ACCESSION NR: AT4024399

ASSOCIATION: Aviationsionnyy institut, Kazan (Aviation Institute)

SUBMITTED: 05Dec61

DATE ACQ: 15Apr64

ENCL: 00

SUB CODE: TD, AS

NO REF SOV: 005

OTHER: 001

Card 4/4

KISILYAKOV, Nikolay Timofayevich, kand. tekhn. nauk [deceased]; BOGDANOV, I.A.,
red.; VENINA, G.P., tekhn. red.

[Principles of analysis of the operation of railroads] Osnovy
analiza ekspluatatsionni raboty zheleznykh dorog. Izd.2., ispr.
i dop. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 194 p.
(Railroads--Traffic) (MIRA 11.87)

KISLYAKOV, N.T., kand. tekhn. nauk; BOGDANOV, I.A., red.; VERINA,
G.P., tekhn. red.

[Fundamentals of the analysis of the operation of railroads]
Osnovy analiza ekspluatatsionnoi raboty zheleznykh dorog.
Moskva, Transzheldorizdat, 1954. 125 p. (MIRA 16:8)
(Railroads—Management)

KISLYAKOV, P.D.; KARGOPOLOV, T.P., general-leytenant voysk svyazi, redaktor;
RUDIN, M.Z., podpolkovnik, predaktor; SRIENIS, N.V., tekhnicheskiy
redaktor

[Communication troops of the Soviet army] Voiska sviazi Sovetskoi
Armii; kratkii ocherk. Moskva, Voen.izd-vo Ministerstva obrony
SSSR, 1955. 212 p. (MIRA 9:3)

(Communications, Military)

S/124/63/000/003/037/065
D234/D308

AUTHOR: Kislyakov, Sava

TITLE: Stability of prismatic shells

PERIODICAL: Referativnyj zhurnal, Mekhanika, no. 3, 1963, 15, abstract 3V91 (Godishnik Inzh.-stroit. in-t. Tak. strcit., arkhitekt. i khidrotekhn., 1961, v. 13, no. 1, 57-71 (Bulg.; summary in Fr.))

TEXT: On the basis of the semi-momentless theory of V. Z. Vlasov the author considers prismatic folds with open profile (or shells approximated by them), compressed along the stringers. He deduces the equations of critical state which differ from V. Z. Vlasov's 8-term equations by the presence of additional terms containing $\sigma_{k-2}, \dots, \sigma_{k+2}$ and the load parameter P in the static group (with respect to $\sigma''_{k-1}, \dots, \sigma''_{k+1}, G_{k-2}, \dots, G_{k+2}$); the kinematic equations (with respect to $\sigma_{k-2}, \dots, \sigma_{k+2}, G''_{k-1}, \dots, G''_{k+1}$) are

Card 1/2

Stability of prismatic shells

S/124/63/000/003/037/065
D234/D308

not varied. The method of trigonometrical series developed by Khristo P. V"rbanov (Izv. Tekhn. in-t B"lg. AN, 1958, no. 5-6, 3-77; RZhMekh, 1959, no. 9, 10516) for arbitrary boundary conditions is used, and its application to the well-known equations of stability of closed profile shells is also shown. The problem reduces to a system of homogeneous algebraic equations whose determinant is made equal to 0. A numerical example is solved. An extension to the case of a weakly pyramidal fold is given. Methods of other generalizations and connection with the problem of stability of a thin-walled rod is discussed. / Abstracter's note: Complete translation.]

Card 2/2

KUNIN, N.F.; KISLYAKOV, S.A.

Dynamic effects of plastic deformation in copper and its
alloys. Dokl. AN BSSR 8 no.2:124-126 F '64. (MIRA 17:8)

1. Belorusskiy gosudarstvennyy universitet imeni Lenina.
Predstavлено академиком AN BSSR R.P. Severdenko.

L 52738-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) PF-4 JD/M
ACCESSION NR: AP5011087 UR/0250/65/009/003/0164/0166

22
21
B

AUTHOR: Kislyakov, S. A.; Kunin, N. F.

TITLE: Some characteristics of the dynamic deformations of alloys

SOURCE: AN BSSR. Doklady, v. 9, no. 3, 1965, 164-166

TOPIC TAGS: alloy deformation, dynamic coefficient, dynamic deformation, induced thermal emf, residual thermal emf, brass deformation, braking effect

ABSTRACT: It is now well established that the incorporation of foreign atoms into crystalline lattices slows down the relaxation processes occurring during plastic deformation. This braking effect should appear at all temperatures. Consequently, the dynamic coefficients in alloys should be less temperature sensitive than the coefficients of pure metals. To test this assumption, experiments were carried out with 0.98 mm diameter wires of α -brass previously annealed for 5 hours at 623K. The dynamic effect of the induced thermal emf was measured by a method described earlier (N. F. Kunin, I. V. Afanas'yeva, S. S. Kozlova, MFT, 12, 595, 1961). Results for the residual thermal emf show that the dynamic coefficients of the alloy are indeed otherwise. (Orig. and trans. in Table)

Card 1/2

L-52738-65

ACCESSION NR: AP5011087

ASSOCIATION: Belorusskiy gosudarstvennyy universitet im. V. I. Lenina (Belo-
russian State University)

SUBMITTED: 03Jul64

ENCL: 00

SUB CODE: MM

NO REF SOV: 003'

OTHER: 000

Card

2/2

KISLYAKOV, S.D. (Sofiya, Bolgariya)

The theory of sloping shells with a two-way curvature. Stroi.
mekh. i rasch. soor. 4 no.1:4-10 '62. (MIRA 16:12)

KISIYAKOV, V.A.

34132. Vliyaniye russkoy Filosofskoy mysli na razvitiye otechestvennoy Fiziologii. Sbornik nauch. rabot studentov Karelo-fin. gos. un-ta, vyp. 1, 1949, s. 5-20

SO: Knizhnaya Letopis' № 6, 1955

KISLYAKOV, V. A., inzh.

Calculating distribution of currents and voltages on an electrified railroad section when a substation drops out of operation.
Trudy MIIT no.104:69-79, '59. (MIRA 12:9)

(Electric railroads—Substations)
(Electric railroads—Wires and wiring)

MARKVARDT, K.G., doktor tekhn.nauk, prof.; KISLYAKOV, V.A., inzh.

Efficient capacity of the power supply system for electric
railroads. Vest. TSNII MPS 20 no.7:15-17 '61. (MIRA 14:12)

1. Moskovskiy institut inzhenerov transporta.
(Electric railroads—Substations)

KISLYAKOV, V.A., inzh.

Determination of the power of a.c. traction substations. Trudy
MIIT no.144:4-9 '62. (MIRA 15:10)
(Electric railroads—Current supply)
(Electric railroads—Substations)

MININ, G.A., kand.tekhn.nauk; SERGEYEV, N.G., kand.tekhn,nauk; BESSONOV,
V.A., inzh.; KISLYAKOV, V.A., inzh.

Use of mathematical statistics and the probability theory for
studying and designing the power supply systems of electric
railroads. Trudy MIIT no.144:38-49 '62. (MIRA 15:10)
(Electric railroads—Current supply)

KISLYAKOV, V.A., inzh.

Use of an iteration method for solving some nonlinear electrical
traction problems. Trudy MIIT no.144:181-186 '62. (MIRA 15:10)
(Electric railroads--Current supply)

KISLYAKOV, V.A., inzh.

Concerning the operation of the auxiliary machinery of a d.c.
locomotive at decreased voltages. Trudy MIIT no.144:197-207
'62. (MIRA 15:10)

(Electric locomotives)

MARKVARDT, G.G.; KISLYAKOV, V.A., inzh., red.

[Some problems in the design of electric power supply systems for single-phase current electric railroads] Ne-kotorye voprosy rascheta sistemy energosnabzheniya elektricheskikh zheleznykh dorog odnofaznogo toka. Moskva, Vses. zaochnyi in-t inzhenerov zhel-dor. transp., 1962. 73 p.
(MIRA 17:3)

KISLYAKOV, V.A., kand.tekhn.nauk

Conditions for calculating the power and the distribution of receivers
of regenerated excessive power. Trudy MIIT no.199:233-237 '65.
(MIRA 18:8)

MARKVARDT, Konstantin Gustavovich, prof., doktor tekhn. nauk;
MININ, G.A., kand. tekhn. nauk, dots., red.; KISLYAKOV,
V.A., kand. tekhn. nauk, red.;

[Electric power supply of electric railroads] Elektro-
snabzhenie elektricheskikh zheleznykh dorog. Moskva,
Transport, 1965. 463 p.
(MIRA 18:12)

KISLYAKOV, V. A

Dissertation: "Conditioned Reflexes to Motor Reactions Which Occur When an Animal is Rotated." Cand Biol Sci, Inst of Physiology imeni I. P. Pavlov, Acad Sci USSR, Moscow, Oct-Dec 53. (Vestnik Akademii Nauk, Moscow, Jun 54)

SO: SUM 318, 23 Dec. 1954

KISIYAKOV, V.A.

Conditioned motor reflexes produced by a reaction set up by rotating the animal. Trudy Inst.fiziol. no.2:69-75 '53. (MLRA 7:5)

1. Laboratoriya interotseptivnykh uslovnnykh refleksov (zaveduyushchiy E.Sh.Arapet'yants). (Conditioned response)

KISLYAKOV, V.A.

Method of the study of vestibular effect on the higher nervous function.
Fisiol. zh. SSSR 39 no.4:486-488 July-Aug 1953. (CMLL 25:1)

1. Laboratory of Interceptive Conditioned Reflexes of the Institute of
Physiology imeni I. P. Pavlov of the Academy of Sciences USSR.

EXCERPTA MEDICA Sec.2 Vol.10/8 Phy.Biocham. Aug 57

3466. KISLAKOV V.A. Enteroreceptive Conditioned Reflexes Lab., Leningrad.
*Influence of rotation on conditioned food reflexes in
dogs (Russian text) TRUDY INST.FIZIOL.I.P.PAVLOVA AKAD.
NAUK 1956, 5 (156-158), Graphs 2

Spinning (one revolution in 3 sec.) for 40 sec. which ended 5-20 sec. before
a conditioned food signal (sound, light) was switched on inhibited the conditioned
reflex activity in dogs: there was a decreased salivation, a differentiation, deepen-
ing and latent periods were prolonged. The shorter the interval between the
end of spinning and the switching-on of the conditioned reflex, the more pronounced
was the inhibition. After multiple application of rotation its inhibitory action de-
creased. References 11.

Pronin - Moscow

EXCERPTA MEDICA Sec. Vol.10/12 Phy.Biochem. Dec. 57
KISLYAKOV V.A.

5251. KISLYAKOV V.A. *Changes in the conditioned statokinetic reflexes in labyrinthectomized dogs (Russian text)
Z. VYŠČ. NERV. DEJATEL. 1956, 6/3 (438-442) Graphs 8

Conditioned statokinetic reflexes (c.s.r.) were elaborated in 4 dogs by rotating them on a special centrifuge (diameter 1 m., 1 cycle per 2 sec.). To counterbalance the centrifugal force the animals leaned against the central wall of the compartment. This unconditioned reaction was registered by a pneumatic system. Stimulation of skin was used as conditioned stimulus for 20 sec. before and 15 sec. after the rotation began. As was shown in previous papers, labyrinthectomy does not change c.s.r. Enucleation performed several months after labyrinthectomy evokes a temporary disturbance of differentiations and reduction of c.s.r. The old c.s.r. soon attained the preoperative level and it was possible to elaborate new ones.

Bureš - Prague

KISLIJAKOV, V.A.

AJRAPETJANG, E.S.; KISLIJAKOV, V.A.; LOBANOVA, L.V.; MOJSEJEVA, N.A.

Role of the motor analyzer in compensatory function of the cerebral cortex. *Cesk. fysiol.* 6 no.3:311-316 Aug 57.

1. Fisiologicky ustav I. P. Pavlova AV SSSR. Laborator interocepionich podminenych reflexu.

(CEREBRAL CORTEX, physiology,

compensatory funct., role of motor analyzer (Cs))

(MOVEMENT,

motor analyzer, role in compensatory funct. of cerebral cortex (Cs))